

## 15.

Notes on the Display Forms of Wahne's Six-plumed  
Bird of Paradise.

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(Text-figures 1-3).

The display forms of the short-tailed members of the genus *Parotia*, as typified by those of the Greater Six-plumed Bird of Paradise (*P. sefilata*) and Lawes' Six-plumed (*P. l. lawesi*), are now well known. But those of Wahne's Six-plumed (*P. wahnesi*) have caused much conjecture, because of the remarkably long tail. It was to be supposed that some variation from the usual forms would be found.

Wahne's Six-plumed Bird of Paradise was unknown in captivity until 1931, when a single male, brought from northeastern New Guinea by Mr. F. Shaw-Mayer, was secured by the Zoological Society of London. No further importations were made until 1939, when Mr. Mayer arrived in London with another shipment. Through the kindness of M. Jean Delacour, we obtained an adult male from this lot. The bird arrived in New York on August 17, 1939, and about October 20 began to molt. By the end of February, 1940, the change had been completed, the four months' molting period being the average for adult males of this genus.

Once the molt was complete, the bird became very active, in marked contrast to the usually phlegmatic conduct of male Six-plumes of other species. Displays were soon observed, and are recorded in the following notes.

When about to display on the ground, the bird stands with its body in a horizontal position, with the wings held closed but high, in order to clear the slightly loosened flank feathers. The tail is turned sideways, usually to the left (Text-fig. 1). The bird feigns picking at the ground, then suddenly throws the body forward and downward with the head turned under the breast, so that its crown is nearly parallel with the ground (Text-fig. 2). The tail now becomes the center of attention, for it is thrown straight upward, behind the crouching body. While all else remains immobile, the graduated lateral feathers are now rapidly opened and closed, the central pair remaining fixed. After this fan-like effect has been obtained perhaps five or six times, the bird suddenly drops the tail and throws its body into an upright position. Simultaneously, the long feathers of the back and flanks are raised to form the "umbrella" well known in other forms of *Parotia*, and the head plumes are thrown far forward, three on each side of the crown (Text-fig. 3). The brilliant breast plate is noticeably flat and lies between a slight extension of the feathers of the upper neck and the erected flank and breast plumes. With the head now extended to its greatest possible height, the bird turns it rapidly from side to side, causing the tabs on the plumes to rotate in the typical manner. Several mincing, short steps are now taken along the



Text-figure 1.  
*Parotia wahnesi*. Position taken preliminary to display.



Text-figure 2.  
*Parotia wahnesi*. First position of display, in which the tail is "fanned."





Text-figure 3.

*Parotia wahnesi*. Final position of the display, climaxed by "wobbling" of the neck.

ground, usually to the right. After moving perhaps a foot in this manner, the bird suddenly becomes immobile except for the neck, which is rapidly moved from side to side, between the head and breast plate. The display usually ends with this maneuver. During the upright form of the display, the tail takes a negligible part and may turn to either side or even drag on the ground.

In preparing to display off the ground, the bird moves about the perches, its body stiffly horizontal and the tail held to the side. When the chosen spot is reached, it throws itself directly into the upright form, the tail-fanning being omitted. The following display is then identical with that performed on the ground, including movement along the perch and "wobbling" of the neck.

While in the series of papers published by the New York Zoological Society on the display forms of Birds of Paradise, no attempt at correlation has yet been made, one point in relation to Wahne's Six-plumed is so striking that it should not be overlooked. The long tail of this species is very suggestive of that of *Astrapia rothschildi*. When it is recalled that the latter bird also "fans" the tail in display<sup>1</sup>, and that the distribution of the two species is generally identical and restricted to a small area in northeastern New Guinea (mountains of the Huon Peninsula), the desirability of further investigation in the field is suggested.

<sup>1</sup> *Zoologica*, Vol. XI, No. 7, p. 81, 1932.

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